## WHAT IS CLAIMED IS:

- 1. A method for capturing images of ground locations and for detecting the presence of material failure(s) or failures in man-made structures in such ground locations comprising the steps of:
- (a) providing an image sensor spaced remotely from the ground and which sequentially captures a number of images of various ground locations to provide digital images;
- (b) processing captured digital images to determine the presence of a potential material failure in a man-made structure in accordance with predetermined coordinate positions which locate the man-made structures in one or more of the captured digital images; and
- (c) indicating to a customer that a potential material failure has been detected in a predetermined coordinate position.
  - 2. The method of claim 1 further including:
- (d) sending captured processed digital images with detected potential material failures to a customer.
- 3. The method of claim 1 wherein the digital image processing includes comparing previously captured digital images with newly captured digital images to determine variations in the captured digital images at the predetermined coordinates which indicate a potential material failure in a manmade structure.
- 4. The method according to claim 1 wherein the digital images are captured by a capture device which is located in a fixed structure position above the ground location or in a moving structure such as an aircraft or satellite.
- 5. The method of claim 3 wherein the image processing includes storing in memory a representation of different material failures to be detected and comparing the captured digital image with the material failures to determine the presence of a material failure, type of material failures and location of the material failures.



- 6. A method for capturing images of ground locations and for detecting the presence of material failure(s) or failures in man-made structures having a detectable chemical agent in such ground locations comprising the steps of:
- (a) providing an image sensor spaced remotely from the ground and which sequentially captures a number of images of various ground locations to provide digital images;
- (b) processing captured digital images to determine changes in the chemical agent which indicate the presence of a potential material failure in a man-made structure in accordance with predetermined coordinate positions which locate the man-made structures in one or more of the captured digital images; and
- (c) indicating to a customer that a potential material failure has been detected in a predetermined coordinate position.
- 7. The method of claim 6 wherein the chemical agent includes materials which when leaked from a receptacle are adapted to be detected.
- 8. The method of claim 6 wherein the chemical agent includes materials which when released react with substances in the ground to provide a detectable material failure to the image sensor.
- 9. A method for capturing images of ground locations and for detecting the presence of material failure(s) or failures in man-made structures in such ground locations comprising the steps of:
- (a) providing an image sensor spaced remotely from the ground and which sequentially captures a number of images of various ground locations to provide digital images;
- (b) processing captured digital images to determine the presence of a potential material failure in a man-made structure in accordance with predetermined coordinate positions which locate the man-made structures in one or more of the captured digital images;
- (c) indicating to a customer that a potential material failure has been detected in a predetermined coordinate position; and
  - (d) correcting material failures.



- 10. A method for capturing images of ground locations and for detecting the presence of failure(s) or material failures in man-made structures in such ground locations and making payment for the detection or correction of detected material failures comprising the steps of:
- (a) providing an image sensor spaced remotely from the ground and which sequentially captures a number of images of various ground locations to provide digital images;
- (b) processing captured digital images to determine the presence of a potential material failure in a man-made structure in accordance with predetermined coordinate positions which locate the man-made structures in one or more of the captured digital images;
- (c) indicating to a customer that a potential material failure has been detected in a predetermined coordinate position;
  - (d) correcting material failures; and
  - (e) making payment for the material failure.
- 11. The method of claim 10 further including providing a chemical agent that includes which materials which when released reacts with substances in the ground to provide a detectable material failure to the image sensor.
- 12. The method of claim 10 wherein the image processing includes comparing previously captured images with newly captured images to determine variations in a ground condition which could contain the material failure.